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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,544	07/16/2003	Ruediger Tueshaus	Dorstener-002	8429

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EXAMINER

CHOI, PETER Y

ART UNIT	PAPER NUMBER
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1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/620,544

Applicant(s)

TUESHAUS ET AL.

Examiner

Peter Y. Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-23 and 43-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-23 and 43-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

FINAL ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 is dependent from claim 5. Claim 6 recites "said filter material comprises wire mesh." The recited filter material lacks antecedent basis as the limitation of "said filter material" is not recited in claim 5 or properly recited in claim 6. Appropriate correction is required.

Response to Arguments

3. Applicants' arguments filed November 30, 2006, regarding the 35 U.S.C. 112, first paragraph rejection of claim 5 have been fully considered but they are moot and not persuasive in view of Applicants' amendments to claims 5 and 6. Claim 5, as amended, does not claim "filter material" and claim 6 is rejected under 35 U.S. C. 112, second paragraph, as set forth above. Regardless, Applicants' arguments that the filter material in the specification is different from the metal mesh material in Eckart is not persuasive. Eckart explicitly teaches an "open mesh having high transparency" (column 3 lines 11-30) which may be used in electromagnetic shielding, storm windows, and table tops among other uses (column 6 lines 6-29). There does not appear to exist differences in the structures when juxtaposing the open mesh invention of Eckart with the filter material in the specification, whether Eckart or the filter material in the

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specification filters any type of particles including light particles. The open mesh invention of Eckart would inherently filter particles as it is identical in structure and composition to the invention disclosed in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 5-7, 9, 11, 12, 21, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,998,028 to Eckart.

Claims 5-7, 9, 11, 12, 21, and 22 remain rejected as substantially set forth in the Non-Final Rejection of July 31, 2006, section 5.

Response to Arguments

6. Applicants' arguments filed November 30, 2006, have been fully considered but they are not persuasive.

Regarding claim 6, Applicants argue that Eckart does not explicitly disclose use of filter material as the mesh as the use of filter material is not an "inherent" feature taught by Eckart. Examiner respectfully disagrees. As set forth above, Eckart explicitly teaches an "open mesh having high transparency" (column 3 lines 10-30) which may be used in electromagnetic shielding, storm windows, and table tops among other uses (column 6 lines 6-29). There does

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not appear to exist differences in the structures when juxtaposing the open mesh invention of Eckart with the filter material in the specification, whether Eckart or the filter material in the specification filters any type of particles including light particles. The open mesh invention of Eckart would inherently and not unexpectedly filter particles, including light particles, as it is identical in structure and composition to the invention disclosed in the specification.

Regarding claim 7, Applicants argue that Eckart does not explicitly teach that the wire mesh of the panel created by Eckart is more reflective on a first side than on a second side. Examiner respectfully disagrees. It should be noted that the amended claim 7 requires the “first side of said wire mesh being visually more reflective than said second side of said wire mesh.” Eckart teaches that the wire mesh may comprise various colors and different metallic materials (column 3 lines 11-30). Separately or in combination, the various colors and the different metallic materials, which inherently have various reflective properties and luster, when formed into the metal mesh would contribute to a side of the metal mesh being visually more reflective than the second side. Additionally, “visually more reflective” assumes that a light source is present. If light is applied to one side of the metal mesh, the side to which the light is applied would inherently be visually more reflective than the second side of the wire mesh to which light is not applied.

Regarding claim 9, Applicants argue that Eckart does not teach or enable the use of round wires and planar wires in the same weave. Examiner respectfully disagrees. Eckart explicitly teaches that the metallic component may be prepared from wire filaments, rods and bars having various cross-sectional areas and geometries, e.g., generally circular, oval or relatively flat (column 3 lines 11-30). Therefore, Eckart teaches that the first wires may comprise a round or

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generally circular or oval cross-section as required by the claim and that the second wires may comprise a cross-section with at least one planar or relatively flat cross-section as required by the claim. While Applicants argue that the weave is unusual or not commonly used in the art, Eckart clearly contemplates forming the metal mesh with filaments, rods and bars with the various cross-sectional areas and geometries as claimed which are suitable for use in the invention of Eckart.

Regarding claim 10, Applicants argument is moot as Examiner did not reject claim 10 under 35 U.S.C. 102(b).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8, 10, 13-20, 23, and 43-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,998,028 to Eckart.

Response to Arguments

9. Applicants' arguments filed November 30, 2006, have been fully considered but they are not persuasive.

Under 35 U.S.C. 103(a), the obviousness of an invention cannot be established by combining the teachings of the prior art references absent some teaching, suggestion or incentive

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supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). This does not mean that the cited prior art references must specifically suggest making the combination. *B.F. Goodrich, Co. v. Aircraft Braking Systems Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988). Rather, the test for obviousness is what the combined teachings of the prior art references would have suggested to those of ordinary skill in the art. *In re Young*, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). This test requires us to take into account not only the specific teachings of the prior art references, but also any inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Regarding claims 8 and 43, Applicants argue that Eckart does not disclose any recognition that light may be more suitably controlled using the mesh than by using the thermoplastic sides and that Eckart does not seem concerned with the “intended effect” of the mesh at all. Examiner respectfully disagrees. It should be noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The invention taught by Eckart is structurally similar to the claimed invention, which comprises one or more layers of substantially transparent material and a wire mesh bonded within one or more layers comprising a first and second plurality of wires with openings (column 1 lines 43-58, column 3 lines 11-30).

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While Eckart does not explicitly state that any of the filaments, rods or bars comprising the metal mesh is triangular in cross-section, Eckart does disclose that the filaments, rods or bars may have various cross-sectional areas and geometries. USPN 5,939,172 to Snakenborg is cited to show that it was known in the decorative woven fabric art at the time the invention was made to form decorative metallic screens with metal wires having a triangular cross-section (Snakenborg, column 6 lines 48-63, column 7 lines 50-53, claim 1). Therefore, as Eckart teaches that the filaments rods or bars may have various cross-sectional areas and geometries and as it was known to those skilled in the art to form metallic screens or metallic woven fabrics with wires having triangular cross-section, claims 8 and 43 remain rejected.

Regarding claims 44 and 45, Applicants argue that using two different types of wires in certain weaves so that the panel can be made non-symmetrical and that Eckart does not remotely suggest this possibility. Examiner respectfully disagrees. As set forth above, Eckart teaches that the metallic component of the invention, which may be used as a decorative panel, may be prepared from wire filaments, rods and bars having various cross-sectional areas and geometries (column 3 lines 21-24). Eckart appears to teach that each of the wire filaments, rods and bars may have various cross-sectional areas and geometries. Based on the type of decorative panel desired, including the transparency of the invention, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form a metal mesh wherein the cross-section of the two wires vary. Alternatively, one of ordinary skill in the art, taking into account the teachings of Eckart, would have inferred that using two different types of wires in certain weaves would be suitable to form the invention of Eckart. As Eckart teaches the

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structure Applicants claim, the specific advantages that Applicants argue are inherent to the structure disclosed in Eckart. Therefore, claims 44 and 45 remain rejected.

Regarding claim 46, Applicants argue that the claimed weave with flat knuckles, with openings which may vary, is not suggested by Eckart. Examiner respectfully disagrees. Eckart teaches that the wire filaments may be prepared from wire filaments, rods and bars having various cross-sectional areas and geometries, such as relatively flat (column 3 lines 21-24). If the wires are relatively flat in a metal mesh or screen, the claimed flat knuckles would inherently exist once the metal mesh is formed as Eckart does not suggest any other substance at the cross-over points forming the knuckles. Alternatively, it would have been obvious to one of ordinary skill in the art to form the metal mesh with flat knuckles which are formed by using relatively planar wires based on the intended application as a decorative wall or partition. Therefore, claim 46 remains rejected.

Regarding claim 47, Applicants argue that Eckart does not teach the transparent material and the wire mesh being different on each side. Examiner respectfully disagrees. Claim 47 only requires that the wire mesh and transparent material comprising a first and second side, the first side being more reflective of light than said second side, the transparent material on the second side being less transparent than the transparent material on the first side. As set forth above, Eckart teaches that the wire mesh may comprise various colors and different metallic materials (column 3 lines 11-30). Separately or in combination, the various colors and the different metallic materials, which inherently have various reflective properties and luster, when formed into the metal mesh would contribute to a side of the metal mesh being visually more reflective than the second side. Additionally, "visually more reflective" assumes that a light source is

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present. If light is applied to one side of the metal mesh, the side to which the light is applied would inherently be visually more reflective than the second side of the wire mesh to which light is not applied. Eckart teaches that the upper and lower sheet materials may be transparent, translucent, or one layer may be opaque, depending on the particular aesthetic effect desired and may vary in color (column 3 lines 53-58). Therefore, as Eckart teaches the claimed structure, claim 47 remains rejected.

Regarding claims 13-16, Applicants argue that the claimed weaves are useful in Applicants' design due to their ability to reduce knuckles to virtually flat levels and produce special visual effects that are both aesthetic and functional and that this type of surface is not predictable from Eckart. Examiner respectfully disagrees. The claims recite each of a twilled weave, a Dutch weave, or a three or greater heddle weave, or variation thereof, comprising knuckles that are substantially flat to reduce diffusion of reflected light. Interpreted broadly, a "variation thereof" appears to encompass a woven or plain woven, which is recited in Eckart, along with other processes well known in the metal wire fabrication trade (column 3 lines 14-16). Even when read in view of the specification, plain weave appears to be a suitable "variation thereof" (Applicants specification, page 13 lines 9-14). As set forth above, if the wires are relatively flat in a metal mesh or screen, the claimed flat knuckles would inherently exist once the metal mesh is formed as Eckart does not suggest any other substance at the cross-over points forming the knuckles. Therefore, as Eckart teaches the claimed structure, claims 13-16 remain rejected.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

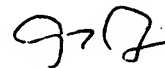
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Peter Y. Choi
February 21, 2007



ANDREW PIZIALI
PRIMARY EXAMINER